

Claims

1. A vehicle air supply system having a compressor, an air dryer, a reservoir adapted to receive air from the compressor via the air dryer, and control means operable to cause a standard regeneration of the air dryer when a predetermined system condition is met, the control means also being operable to cause an intermediate regeneration of the air dryer in advance of said predetermined system condition being met, wherein the control means are further operable to inhibit said intermediate regeneration.
- 10 2. An air supply system as claimed in claim 1, wherein the control means include a governor adapted to cause a standard regeneration and a governor bypass adapted to cause an intermediate regeneration, the control means being adapted so as to disable the governor bypass to inhibit the intermediate regeneration.
- 15 3. An air supply system as claimed in claim 1 or claim 2, wherein the predetermined system condition is a reservoir pressure and the governor is adapted to operate when the reservoir reaches a target pressure.
- 20 4. An air supply system as claimed in claim 3, wherein the governor sends an off load/purge signal to the compressor and air dryer when the target pressure is reached.
5. An air supply system as claimed in claim 4, wherein the signal is a pressure signal.
- 25 6. An air supply system as claimed in claim 2, wherein the control means are adapted to bypass the governor and send an off load/purge signal to the compressor and air dryer.
- 30 7. An air supply system as claimed in claim 6, wherein the control means includes a bypass line for the governor, a valve positioned in said bypass line and a timer adapted to open said valve.

8. An air supply system as claimed in claim 7, wherein the valve is solenoid operated.
- 5 9. An air supply system as claimed in claim 7 or claim 8, wherein the timer is activated and suspended in response to a predetermined system condition.
- 10 10. An air supply system as claimed in claim 6, wherein there is provided means to block the signal to the compressor and air dryer so as to inhibit an intermediate regeneration.
11. An air supply system as claimed in any of claims 7 to 9, wherein the timer is operable so as to inhibit an intermediate regeneration.
- 15 12. An air supply system as claimed in claim 11 wherein the timer is operable to reduce the time period between subsequent regenerations after inhibiting an intermediate regeneration.